

U.S. DEPARTMENT OF ENERGY
NEVADA OPERATIONS OFFICE

POLICY

NV P 450.4B

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**SAFETY MANAGEMENT SYSTEM
POLICY**



INITIATED BY:
Assistant Manager
for Technical Services

SAFETY MANAGEMENT SYSTEM POLICY

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PURPOSE AND SCOPE

This Policy supplements DOE P 450.4. The purpose of this Policy is to describe the unique aspects of Department of Energy (DOE) Nevada Operations Office's (DOE/NV) overall approach to implementing Integrated Safety Management (ISM) throughout the DOE/NV complex. This Policy is applicable to DOE/NV and all organizations performing work under DOE/NV's purview.

CANCELLATION

NV P 450.4A, SAFETY MANAGEMENT SYSTEM POLICY, dated 12-15-99, and Changes thereto.

REFERENCES

DOE P 450.4, SAFETY MANAGEMENT SYSTEM POLICY, dated 10-15-96.

NV M 111.XA, FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES.

NV M 220.XA, DOE/NV OVERSIGHT MANAGEMENT SYSTEM, dated 8-22-00.

NV O 230.X, DOE/NV LESSONS LEARNED PROGRAM, dated 10-28-99.

NV M 360.1A-1, FEDERAL EMPLOYEE TRAINING MANUAL, dated 3-7-00, and Changes thereto.

NV M 412.X1A, REAL ESTATE/OPERATIONS PERMIT, dated 8-22-00.

NV M 412.X2, READINESS REVIEW, dated 8-22-00.

NV O 412.X3, WORK CONTROL, dated 8-22-00.

NV M 450.XA, AUTHORIZATION AND ACTIVITY AGREEMENTS FOR FACILITIES AND OPERATIONS, dated 11-4-99, and Changes thereto.

NV O 450.4, SAFETY MANAGEMENT SYSTEM MAINTENANCE, dated 8-22-00.

NV O 481.1, WORK FOR OTHERS (NON-DOE FUNDED WORK), dated 3-23-00, and Changes thereto.

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POLICY

It is the policy of DOE/NV to ensure the safe accomplishment of all work by adherence to the DOE's ISM Principles and Functions. Safety encompasses environment, safety, and health (ES&H), including pollution prevention and waste minimization. Accordingly, DOE/NV management organization and operating systems are established which ensure assignment of responsibilities, and document requirements, accountability expectations, and processes for improvement. A cross walk of DOE/NV's key ISM implementing mechanisms for the ISM functions and principles is provided in Attachment 1.

COMPONENT 2: *Guiding Principles for ISM*

Line Management Responsibility for Safety

The DOE/NV Manager maintains the overall responsibility to ensure safe conduct of operations at the Nevada Test Site (NTS) and other locations under the purview of DOE/NV. This overall safety responsibility cannot be delegated but is shared with each DOE/NV organizational element and organizations performing work under DOE/NV's purview. Each of the organizations performing work within DOE/NV's purview maintain documents that define organizational structure, Line Management chain(s) of command, and clear roles and responsibilities. For DOE/NV, NV M 111.XA, FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES MANUAL (FRAM), defines this information.

The DOE/NV Manager fulfills his/her overall safety responsibility by effectively managing the risks associated with missions performed under DOE/NV's purview. DOE/NV risk management is accomplished through the use of DOE/NV Line Managers and technical support staff, who work together to ensure that work is properly planned, authorized, and controlled.

When used throughout the text of DOE/NV Directives, unless otherwise stated, the term "risk" refers to an expert-based opinion, or qualitative assessment, of the potential undesirable consequences and their likelihoods. Although risk is generally accepted as a function of likelihood and consequence, the term "risk" as used in the DOE/NV Directives in no way refers to, or implies a probabilistic risk assessment or other quantitative analytical method. Consequences of concern to senior management in this context include, but are not limited to, issues pertaining

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to safety, program or operations, security, public relations, etc. Effective risk management is achieved through implementation of various DOE/NV work authorization, management, and oversight Directives.

Each organization performing work under the purview of DOE/NV is responsible for the safety of their employees, protection of co-located persons, and protection of the environment. All organizations performing work under DOE/NV's purview are expected to "do work safely."

Attachment 2 describes DOE/NV's approach to establishing line management responsibility for safety.

Workers are encouraged to participate in work planning, ensure hazard controls associated with their work are understood and implemented, raise issues involving safety, and take appropriate action in response to hazards encountered during work activities or emergencies. All employees have the authority to refuse unsafe work assignments or unsafe work conditions, and stop work. Employee concerns may be communicated confidentially through the DOE/NV EMPLOYEE CONCERNS HOTLINE.

Clear Roles and Responsibilities

DOE Nevada Operations Office

DOE/NV is assigned specific missions by DOE Headquarters program offices which sets the course for DOE/NV's Strategic Plan. DOE/NV translates these missions into work authorization instruments (task plans, letters of direction, Real Estate/Operations Permits (REOP), which direct the work to be performed by DOE/NV and DOE/NV contractors.

DOE/NV reviews proposed new work and significant changes to existing work that presents risks, which exceed established criteria. DOE/NV professional staff and/or acquired experts review this work to ensure that risks are identified and applicable requirements and controls are established by the proposer to appropriately manage risk. DOE/NV Line Management and support staff ensure that risks are being properly managed through their federal management and oversight roles.

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Due to the diversity of federal and private organizations that perform work on the NTS, there is a need for DOE/NV to ensure that the activities of one NTS operations do not conflict with the activities of other operations. DOE/NV's Site Management Division (SMD) performs this function. SMD ensures that work on the NTS is properly scheduled and appropriate area control established to prevent adverse conflicts between operations.

DOE/NV has established specific responsibilities and authorities for DOE/NV Managers and specific categories of employees who perform defined functions. Such employee position categories include Program/Project Managers, Task Managers, Functional Managers, Facility Representatives, and Subject Matter Experts. Responsibilities and authorities for these position categories are specified in the DOE/NV FRAM, NV M 111.XA.

DOE/NV Contractors and User Organizations

Bechtel Nevada (BN)--Performance-Based Management Contractor (PBMC)

BN manages and operates the NTS infrastructure (roads, power, sewer, water, feeding, housing, warehousing, property management, etc.). BN provides construction, mining, and technical support services to meet the needs of the DOE/NV and user organizations. As the PBMC at the NTS, BN is responsible for all areas and facilities of the NTS except for those areas or facilities specifically assigned to another organization via REOPs. BN also operates facilities off the NTS and is responsible for the safety of operations performed at these BN managed off-site facilities.

The BN contract includes DEAR 970.5402-2 and 970.5204-78 clauses, and the identification of specific laws, regulations, DOE Directives and other standards (List A and B). BN has developed a Management Description Document and an ISM System (ISMS) Description Document that together establish the framework for documenting their approach to safe work performance. BN employees are obligated to conform to BN's ISMS description wherever they may perform their work and adhere to all commitments specified in DOE/NV--BN activity agreements. BN maintains a feedback and improvement system that is integrated with other NTS organizations to make productive use of lessons-learned.

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The DOE/NV Contracting Officer may formally designate individuals within the national laboratories to act as authorized representatives to provide technical direction (regarding BN's support to the national laboratories) to BN as specified in the DOE/NV-BN contract. Such individuals are referred to as Designated Officials.

Wackenhut Services, Inc. (WSI). WSI is DOE/NV's security protection services contractor. The WSI contract includes DEAR 970.5402-2 and 970.5204-78 clauses, and the identification of specific laws, regulations, DOE Directives, and other standards (Lists A and B). WSI conducts their operations in accordance with their ISMS description. WSI maintains a feedback and improvement system that is integrated with other NTS organizations to make productive use of lessons-learned.

International Technology Corporation (IT). IT provides environmental investigation services, remedial actions, data acquisition/management, field services, public involvement, and environmental documentation. The IT contract includes DEAR 970.5402-2, 970.5204-78 clauses, and a List B for DOE Directives. IT conducts their operations in accordance with their ISMS description. IT maintains a feedback and improvement system that is integrated with other NTS organizations to make productive use of lessons-learned.

National Laboratories. The national laboratories, Los Alamos National Laboratory (LANL), Lawrence Livermore National Laboratory (LLNL), and Sandia National Laboratories (SNL) are the primary users of the NTS. LANL and SNL are under contract to DOE through the DOE Albuquerque Operations Office (DOE/AL). DOE/NV and DOE/AL maintain a Management Agreement to document each organization's management and oversight responsibilities with respect to LANL's and SNL's activities on the NTS. Likewise, LLNL is under contract to DOE through the DOE Oakland Operations Office (DOE/OAK). DOE/NV and DOE/OAK maintain a Management Agreement to document each organization's management and oversight responsibilities with respect to LLNL's activities on the NTS.

Each year, the respective national laboratories provide to the DOE/NV contractors, through the appropriate Assistant Manager, a written statement of programmatic requirements. Individuals with the national laboratories may be authorized in writing by the DOE/NV Contracting Officer to serve as Designated

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Officials to provide technical direction to specific DOE/NV contractors. All technical direction is formally provided to the contractor. The actions of a Designated Official may not change the contract Statement of Work, contract cost, or Terms and Conditions of the contract.

Complementary to formal technical direction, it is expected that there will be full and open communication between the functional counterparts of DOE/NV, the national laboratories, and the contractor organizations. Such communication facilitates a clear and consistent understanding of the technical performance requirements of the work and contribute to the accomplishment of the work in a highly professional, coordinated, efficient, and cost-effective manner.

Los Alamos National Laboratory

LANL utilizes the NTS and support services provided by DOE/NV contractors to conduct experiments associated with the LANL mission, as well as Work for Others (WFO) work for various agencies. LANL maintains a contingent of LANL employees at the NTS to facilitate and support the work of experimenters traveling from the home office. As the delegated lead organization for certain assigned facilities or operations, LANL ensures the safe conduct of work performed by LANL employees and the "safety coordination" of work at these locations among the various participants.

LANL employees performing work at the NTS implement the LANL ISMS Description Document for NTS work. LANL adheres to all commitments specified in DOE/NV LANL executed authorization/activity agreements. LANL Line Management ensures that operations conducted by LANL employees at the NTS are adequately defined, hazards are identified, and hazard controls and standards are identified and implemented in work performance. LANL/NTS maintains a feedback and improvement system that is integrated with other NTS organizations to make productive use of lessons-learned.

Lawrence Livermore National Laboratory

LLNL utilizes the NTS and support services provided by DOE/NV contractors to conduct experiments associated with the LLNL mission, as well as WFO work for various agencies. LLNL maintains a contingent of

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LLNL employees at the NTS to facilitate and support the work of experimenters traveling from the home office. As the delegated lead organization for certain assigned facilities or operations, LLNL ensures the safe conduct of work performed by LLNL employees and the “safety coordination” of work at these locations among the various participants.

LLNL employees performing work at the NTS implement the requirements in the LLNL ISMS Description Document for NTS work. LLNL adheres to all commitments specified in DOE/NV LLNL executed authorization/activity agreements. LLNL Line Management ensures that operations conducted by LLNL employees at the NTS are adequately defined, hazards are identified, and hazard controls and standards are identified and implemented in work performance. LLNL/NTS maintains a feedback and improvement system that is integrated with other NTS organizations to make productive use of lessons-learned.

Sandia National Laboratories

SNL utilizes the NTS and support services provided by DOE/NV contractors to conduct experiments associated with the SNL mission, as well as WFO work for various agencies. SNL maintains a small contingent of SNL employees at the NTS to facilitate and support the work of experimenters traveling from the home office. As the delegated lead organization for certain assigned facilities or operations, SNL ensures the safe conduct of work performed by SNL employees and the “safety coordination” of work at these locations among the various participants.

SNL employees performing work at the NTS implement the SNL Integrated Laboratory Management System requirements for NTS work. SNL adheres to all commitments specified in DOE/NV SNL executed authorization/activity agreements. SNL Line Management ensures that operations conducted by SNL employees at the NTS are adequately defined, hazards are identified, and hazard controls and standards are identified and implemented in work performance. SNL/NTS maintains a feedback and improvement system that is integrated with other NTS organizations to make productive use of lessons-learned.

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Federal Agencies

The Defense Threat Reduction Agency (DTRA) utilizes the NTS and support services provided by DOE/NV contractors to conduct experiments associated with the DTRA mission. DTRA maintains a contingent of DTRA employees at the NTS to facilitate and support the work of experimenters and DTRA contractors traveling from other locations. As the delegated lead organization for certain delegated facilities or operations, DTRA ensures the safe conduct of work performed by DTRA employees and the “safety coordination” of work at these locations among the various participants.

DTRA implements ISMS in accordance with a Memorandum of Agreement between DOE/NV and DTRA and consistent with their ISM description document. DTRA adheres to all commitments specified in DTRA REOPs and DOE/NV--DTRA executed Authorization/Activity Agreements. DTRA Line Management ensures that operations conducted by DTRA employees and DTRA contractors at the NTS are adequately defined, hazards are identified, and hazard controls and standards are identified and implemented in work performance. DTRA maintains a feedback and improvement system that is integrated with other NTS organizations to make productive use of lessons-learned.

There are a number of other federal agencies that perform work at the NTS or in support of DOE/NV programs. These agencies include the National Oceanic and Atmospheric Administration/Air Resources Laboratory, U.S. Geological Survey, and Environmental Protection Agency. Memoranda of Understanding or Memorandum of Agreements with these agencies have been developed to document the roles and responsibilities of each of the federal organizations in relation to work performed at sites under the purview of DOE/NV. All federal agencies are responsible for the safety of their employees pursuant to federal employee occupational safety and health program requirements. They are expected to comply with applicable laws, regulations, standards, and DOE/NV Directives for work conducted under the purview of DOE/NV.

Other NTS Users. Numerous other organizations perform work on the NTS, e.g., Desert Research Institute, various universities, vendors, private companies, and other government entities. These organizations are not required to have an ISM Description Document. However, they are required to conduct their work in a manner that meets the objectives and intent of contracts

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or agreements regarding ES&H. They are also expected to comply with applicable laws, regulations, standards, and DOE/NV Directives for work conducted under the purview of DOE/NV. Appropriate management of operational risks is ensured through the DOE/NV REOP process and DOE/NV oversight activities.

Competence Commensurate With Responsibility. Managers and supervisors are expected to understand the technical complexity of the work assigned to direct reports, identify the requisite technical competencies needed to perform the work, and ensure that their direct reports acquire and maintain these competencies. Organizations utilize formal mechanisms in to ensure that employees possess the required competencies needed to perform their tasks safely. DOE/NV implements NV M 360.1.1A-1, FEDERAL EMPLOYEE TRAINING MANUAL, which defines DOE/NV's qualification program addressing both professional and technical qualifications.

Balanced Priorities. Management is expected to ensure an adequate balance between successful achievement of their mission, the safety of people, and protection of the environment. To achieve this balance, Line Managers consider mission requirements and safety issues, deficiencies, and commitments when planning, prioritizing, budgeting, authorizing, performing, and managing existing work and change control of work within DOE/NV's purview.

DOE/NV relies upon its PBMC to provide objective screening and prioritization of needed line and infrastructure improvements through a process that balances ES&H, security, and mission. Additionally, DOE/NV utilizes program/project on-site monitoring activities, the DOE/NV Oversight Tracking System, Work Smart Standards (WSS), and other safety performance information to identify and mitigate programmatic and safety concerns. Finally, DOE/NV independent ES&H perspective is provided to Line Management regarding recommended priorities.

Line Management considers this information to appropriately balance priorities and provide effective and efficient program execution through task plans. The DOE/NV Resource Management Council (Reference NV O 124.X, PLANNING AND BUDGET PRIORITIZATION OF WORK) integrates the Line Management perspective and recommendations of the DOE/NV Management System Steering Panel (Reference NV O 450.4, SAFETY MANAGEMENT SYSTEM MAINTENANCE) to provide overall corporate guidance and direction to DOE/NV

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contractors for budget planning purpose. Task plans are developed in accordance with NV O 410.XA, TASK PLAN AND CHANGE CONTROL PROCESS, to execute those priorities identified in the prioritization process.

Hazard Controls Tailored to Work Performance

DOE/NV has established the REOP process, in part, to ensure that hazard controls are tailored to work performance. Defined criteria, which when met or exceeded, causes the proposer of new work or changes to existing work to seek DOE/NV concurrence on proposed hazard controls and other nonsafety-related risks as applicable. The DOE/NV REOP data base (managed by the DOE/NV PBMC) provides access to authorization basis documentation and other information.

At the activity level, DOE/NV has established minimum requirements for work packages. This approach ensures that requisite information of work at the activity level is available to REOP holders to enable them to fulfill their safety coordination responsibilities. Reference NV O 412.X3, WORK CONTROL.

Identification of Safety Standards and Requirements

DOE/NV has established a complex-wide WSS for most common work activities. The DOE/NV WSS include a description of work; identification of hazards/risks; and identification of laws, regulations, DOE Directives, industry standards, and other documents that serve as standards for work performance. The DOE/NV WSS, and other lists of Directives to cover exempt work, meet the expectations of DEAR 970.5204-78 and have been placed in BN and WSI contracts. BN and WSI adhere to these requirements at a minimum, even when performing work in support of other organizations. DOE/NV maintains other Directives that may be applicable to organizations performing work under DOE/NV's purview. These other Directives may be identified in contracts and other agreement instruments.

Change control of the DOE/NV WSS or any other DOE/NV approved set of standards incorporated in DOE/NV contracts is accomplished through the WSS Change Review Group (CRG) or by the Contracting Officer (IT contract unique B List). The CRG, composed of representatives of DOE/NV and contractor/national laboratories/ user organizations, review proposed changes for potential impact on their organizations and integration throughout the DOE/NV complex. This process is defined in NV M 450.3XA, WORK SMART STANDARDS.

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National laboratory personnel conducting work under the purview of DOE/NV, follow their organizational contract set of standards. DOE/NV has established mechanisms with DOE/AL and DOE/OAK to identify any DOE/NV unique requirements in the national laboratory contracts.

Each organization implements their WSS or other sets of standards (B-Lists) through company documents. These company documents are utilized by employees to control their work. In some cases, proposed work or an unanalyzed hazard may not be covered by company level documents. In such cases a means is provided to review and, if needed, establish a new or revised standard and company level implementing document.

Operations Authorizations

Operations within DOE/NV's purview are conducted in facilities (buildings and structures) and in open range areas on and off the NTS. Under all conditions DOE/NV ensures that risks are properly identified and managed, and that there is always one organization responsible for "safety coordination" of activities at any work site. DOE/NV specifies various approval conditions tailored to the inherent risks and operations. This is accomplished through mechanisms such as the DOE/NV REOP, WFO requirements, Authorization/Activity Agreements, and Economic Development Use Permits as described below.

Real Estate/Operations Permit. The use of any real estate for any purpose is authorized by a REOP, NV M 412.X1B, REAL ESTATE/OPERATIONS PERMIT. The REOP provides the essential information and supporting documentation to ensure that risks are appropriately identified and managed. DOE/NV is involved in the review and approval of certain new or revised REOPs which cover work that presents risks that meet or exceed established criteria. As a part of the REOP process, potential work is screened per NV M 412.XA, PROJECT SCREENING AND LOCATION APPROVAL PROCESS, and readiness reviews are conducted per NV M 412.X2. REOP approval by DOE/NV is based on the proposer's fulfillment of all conditions stipulated in the REOP and acknowledges that the proposer has complied with DOE/NV requirements.

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Work for Others. NV O 481.1, WORK FOR OTHERS, specify additional requirements for authorizing work that is non-DOE funded. Meeting these requirements results in the development of part of the authorization basis for the REOP.

Authorization/Activity Agreements

The DOE/NV Manager has identified several DOE/NV facilities and operations which pose significant overall hazard to workers, the public, and the environment and has determined that these facilities and operations be managed under the provisions of an Authorization/Activity Agreement. An Authorization Agreement is required for Categories 1 and 2 nuclear facilities. An Activity Agreement is required for Hazard Category 3 nonreactor nuclear facilities or any other facility/operation under DOE/NV's purview as determined by the DOE/NV Manager; reference NV M 450.XA, AUTHORIZATION AND ACTIVITY AGREEMENTS FOR FACILITIES AND OPERATIONS.

The content and format of DOE/NV Activity Agreements is consistent with that of the Authorization Agreement, which identifies the nature of the work and the technical basis upon which the DOE/NV Manager authorizes the work to be performed. These agreements establish a link to other authorization basis documents and commitments to implement established systems and controls. Collectively, the Authorization/Activity Agreement and referenced authorization basis documents become the major part of the complete authorization basis for the REOP.

Economic Development Use Permit. The Economic Development Use Permit is a comprehensive authorization document utilized for Section 3161 Facility Reuse Activities which are funded and conducted on site by private, commercial entities sponsored by the NTS Development Corporation. The permit specifies environmental and facility baselines and incorporates safety and operational criteria based on risk assessments for the particular activity authorized.

At the activity level, DOE/NV has instituted minimum expectations for work packages. This provides a basic framework upon which REOP holders can fulfill their safety coordination responsibility and effectively authorize work. This mechanism is defined in NV O 412. X3, WORK CONTROL.

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COMPONENT 3: ***Core Functions for ISM.*** Attachment 3 provides a summary of the key roles and responsibilities associated with each of the five core functions.

Define the Scope of Work. DOE/NV translates missions into broad work scopes. Expectations are defined for contractor and user organizations. Appropriate ES&H performance measures and other ES&H performance indicators for performance-based fee contractors are identified to emphasize and drive needed improvements in various aspects of ISM implementation and other areas of work performance.

Analyze the Hazards. The hazards involved in any work activity must be identified, analyzed, and categorized so that appropriate safety standards and controls can be selected commensurate with the work to be performed. The system to identify, analyze, and categorize the hazards should also be tailored to the expected hazards for the facility/activity.

Develop and Implement Controls. Based on analysis of work and the associated hazards of that work and the workplace, controls are developed to prevent or mitigate the hazards to ensure adequate protection of workers, the public, and the environment. Additionally, controls are implemented to ensure compliance with federal, state, and local regulations and laws, and those DOE Directives included in contractual/agreement terms and conditions. These controls are based on federal, state, and local regulations and contractual/agreement requirements and are developed and implemented by contractors through processes, programs, and procedures.

Perform the Work. DOE/NV implements mechanisms to provide appropriate authorization to initiate work. DOE/NV is responsible for ensuring that work is performed and that operations are conducted in accordance with conditions and requirements. DOE/NV may shut down work/operations if violations of conditions or requirements occur that significantly diminish the safety of workers, the public, or the environment.

Provide Feedback and Continuous Improvement

DOE/NV utilizes feedback information to improve its work processes. Feedback information is derived from various sources including self-assessments, organizational internal assessments, external assessments, occurrence reports, lessons learned, accident investigation reports, etc. Mechanisms used to acquire this feedback include NV M 220.XA, DOE/NV OVERSIGHT MANAGEMENT

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SYSTEM, and NV O 230.X, DOE/NV LESSONS LEARNED PROGRAM. DOE/NV utilizes the Management System Steering Panel to monitor the effectiveness of DOE/NV's safety management systems and to coordinate system improvements within the DOE/NV complex. Based on this feedback and other factors, DOE/NV provides annual program and budget execution guidance and direction to DOE/NV contractors, DTRA, and the national laboratories for the coming fiscal year. Guidance or direction to the national laboratories is coordinated through their respective DOE Contracting Official.

DOE/NV contractors (with DEAR 970.5204-2 clause in their contracts) and DTRA annually update their safety performance objectives, performance measures, and commitments for DOE/NV approval in response to DOE/NV's program and budget execution guidance and direction. DOE/NV contractors, DTRA and the national laboratories ensure that hazard controls continuously function through an effective self-assessment program. Feedback from self-assessments, assessments, occurrence reports, accident investigations, lessons-learned, etc., is used to continually improve procedures, processes, and conduct of operations. DOE/NV evaluates its contractors' performance and monitors performance measures to determine conformance with contract requirements per NV M 210.X, CONTRACTOR PERFORMANCE EVALUATION.

DOE/NV performs oversight of national laboratory operations conducted under the purview of DOE/NV. DOE/NV provides DOE/AL and DOE/OAK perspective on the safety performance of their contractors (the national laboratories) working under the purview of DOE/NV. These responsibilities are defined in the Memoranda of Agreement between DOE/NV and DOE/AL, and DOE/OAK. Results derived from the oversight of other user organizations determines their continued use of assets and resources under DOE/NV's stewardship.

DOE/NV contractors and DTRA utilize long-term maintenance processes to ensure the adequacy and effectiveness of ISMS. Mechanisms used to achieve this objective are identified in NV O 450.4, SAFETY MANAGEMENT SYSTEM MAINTENANCE.



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Manager

**DOE NEVADA OPERATIONS OFFICE (DOE/NV) IMPLEMENTING MECHANISMS FOR
INTEGRATED SAFETY MANAGEMENT (ISM) FUNCTIONS AND PRINCIPLES**

		NV M 111.XA, Functions, Responsibilities, and Authorities Manual	NV O 124.X Planning and Budget Prioritization of Work	NV M 210.X Contractor Performance Administration	NV M 220.XA, DOE/NV Oversight Management System	NV O 230.X, DOE/NV Lessons Learned Program	NV M 360.1A-1, Federal Employee Training Manual	NV M 410.XA, Task Plan and Change Control Process	NV M 412.XA, Project Screening and Location and Approval Process
F u n c t i o n s	Define the Work	✓	✓	✓				✓	✓
	Analyze the Hazards	✓						✓	
	Develop and Implement Hazard Controls	✓						✓	
	Perform Work Within Controls	✓						✓	
	Provide Feedback and Continuous Improvement	✓		✓	✓	✓			
P r i n c i p l e s	Line Management Responsible for Safety	✓							
	Clear Roles and Responsibilities	✓			✓	✓	✓	✓	
	Competence Commensurate With Responsibility	✓					✓		
	Balanced Priorities	✓	✓					✓	
	Identification of Safety Standards and Requirements	✓							
	Hazard Controls Tailored to Work Performance	✓							
	Operations Authorization	✓						✓	

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DOE/NV IMPLEMENTING MECHANISMS FOR ISM FUNCTIONS AND PRINCIPLES (Continued)

		NV M 412.X1B, Real Estate/ Operations Permit	NV M 412.X2 Readiness Review	NV O 412.X3, Work Control	NV M 450.3XA, Work Smart Standards	NV O 450.4 Safety Management System Maintenance	NV P 450.4B, Safety Management Policy	NV M 450.XA, Authorization and Activity Agreements for Facilities and Operations	NV O 481.1, Work for Others
F u n c t i o n s	Define the Work	✓	✓	✓	✓		✓	✓	✓
	Analyze the Hazards	✓	✓	✓	✓		✓	✓	✓
	Develop and Implement Hazard Controls	✓	✓	✓	✓		✓	✓	✓
	Perform Work Within Controls	✓	✓	✓			✓	✓	✓
	Provide Feedback and Continuous Improvement		✓	✓	✓	✓	✓		
P r i n c i p l e s	Line Management Responsible for Safety		✓	✓			✓		
	Clear Roles and Responsibilities	✓	✓	✓	✓	✓	✓	✓	✓
	Competence Commensurate With Responsibility		✓	✓			✓		
	Balanced Priorities		✓				✓		
	Identification of Safety Standards and Requirements		✓		✓		✓		
	Hazard Controls Tailored to Work Performance	✓	✓	✓			✓		
	Operations Authorization	✓	✓	✓			✓	✓	✓

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LINE MANAGEMENT RESPONSIBILITY FOR SAFETY

GENERAL

Each organization is always responsible for the safety of their own employees regardless of where their employees perform their duties.

Line management is responsible for: 1) defining the scope of work; 2) ensuring that workers have the knowledge, skills, and abilities (KSA) to identify the hazards associated with an activity; 3) ensuring that the hazards control system is effectively implemented; 4) ensuring that workers have the KSAs, including physical capabilities, to perform the assigned work safely; 5) authorizing the defined work, subject to the appropriate controls; 6) ensuring that the workers perform the work safely and in conformance with applicable institutional, facility, and activity controls; 7) monitoring and, as appropriate, strengthening the work activity's safety performance; and 8) acquiring feedback, including worker input, for system improvements.

While each organization is responsible for the safety of their own employees, the interaction of multiple organizations at a common work site requires that there always be one organization designated as the lead organization responsible for "Safety Coordination." The Real Estate/Operations Permit (REOP) holder is assigned "Safety Coordination" responsibility for the real estate and/or operations covered by the REOP. "Safety Coordination" is defined as the actions necessary to: 1) ensure the activities of one organization do not present unknown hazards to another organization through concurrence in and communication of participants' hazard assessments, 2) ensure the requirements and implementing documents of all organizations are sufficiently integrated to avoid adverse consequences, 3) ensure each organization is prepared to take appropriate emergency response actions to protect people and the environment, and 4) ensure, through tailored oversight, that any secondary REOP high hazard consequence operations are being performed in accordance with expectations.

High hazard consequences are defined as "potential results of uncontrolled hazards that may result in severe injury or death; have a major adverse impact on the environment, property, programmatic funding, or public relations.

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PRIMARY REOP HOLDER

The DOE Nevada Operations Office (DOE/NV) has determined that only DOE/NV, the national laboratories, the Defense Threat Reduction Agency, Bechtel Nevada (BN), Wackenhut Security Services, IT Corporation, and the DOE/NV Yucca Mountain Project will hold primary REOPs. BN, as the DOE/NV Performance-Based Management Contractor, shall hold the primary REOP for all real estate/operations not held by any other authorized organization, i.e., Balance of Plant.

The chain of safety responsibility for this defined real estate and/or operation extends from the DOE/NV Manager to the head of the organization holding the primary REOP, down through an organization specific line management chain, to the workers of the organization (or workers of another organization “assigned” to the organization holding the primary REOP). This is called the Organizational Safety Chain of Responsibility. See Figure 1 below.

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Organization Safety Chain of Responsibility

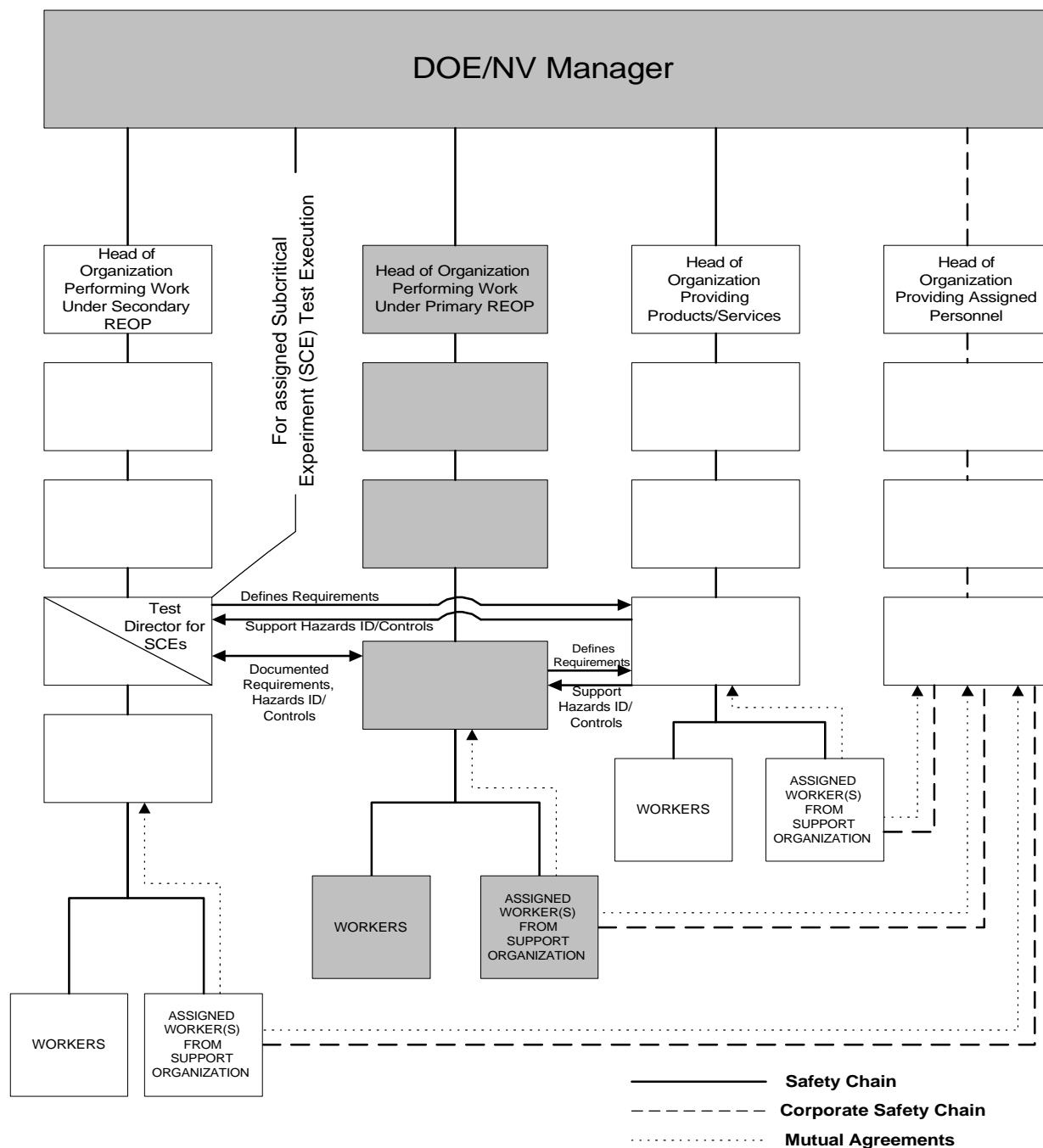


Figure 1

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SECONDARY REOP HOLDERS

In some cases it is necessary for separate organizations to conduct operations in a facility in which only one organization holds the Primary REOP. Under such conditions, other co-located organizations conducting operations in the facility are identified as secondary REOP holders and are obligated to define and communicate their hazards and controls to the Primary REOP holder. This provides the Primary REOP holder the information necessary to ensure that the total safety envelope can be maintained.

Like Primary REOP holders, Secondary REOP holders are also responsible for the safety coordination of work covered by their Secondary REOP. The chain of safety responsibility for the defined real estate and/or operation under a secondary REOP extends from the DOE/NV Manager to the head of the organization holding the secondary REOP, down through an organization specific management chain, to the workers.

In the case of an SCE, a special relationship is defined and formally authorized between the DOE/NV Manager and the Laboratory's Test Director responsible for a specific SCE. This relationship is established under a Secondary REOP when the Test Laboratory takes beneficial occupancy of the "experiment bed," and is responsible for the safety coordination for all activities within the experiment specific area. See Figure 2 below.

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Organization Safety Chain of Responsibility

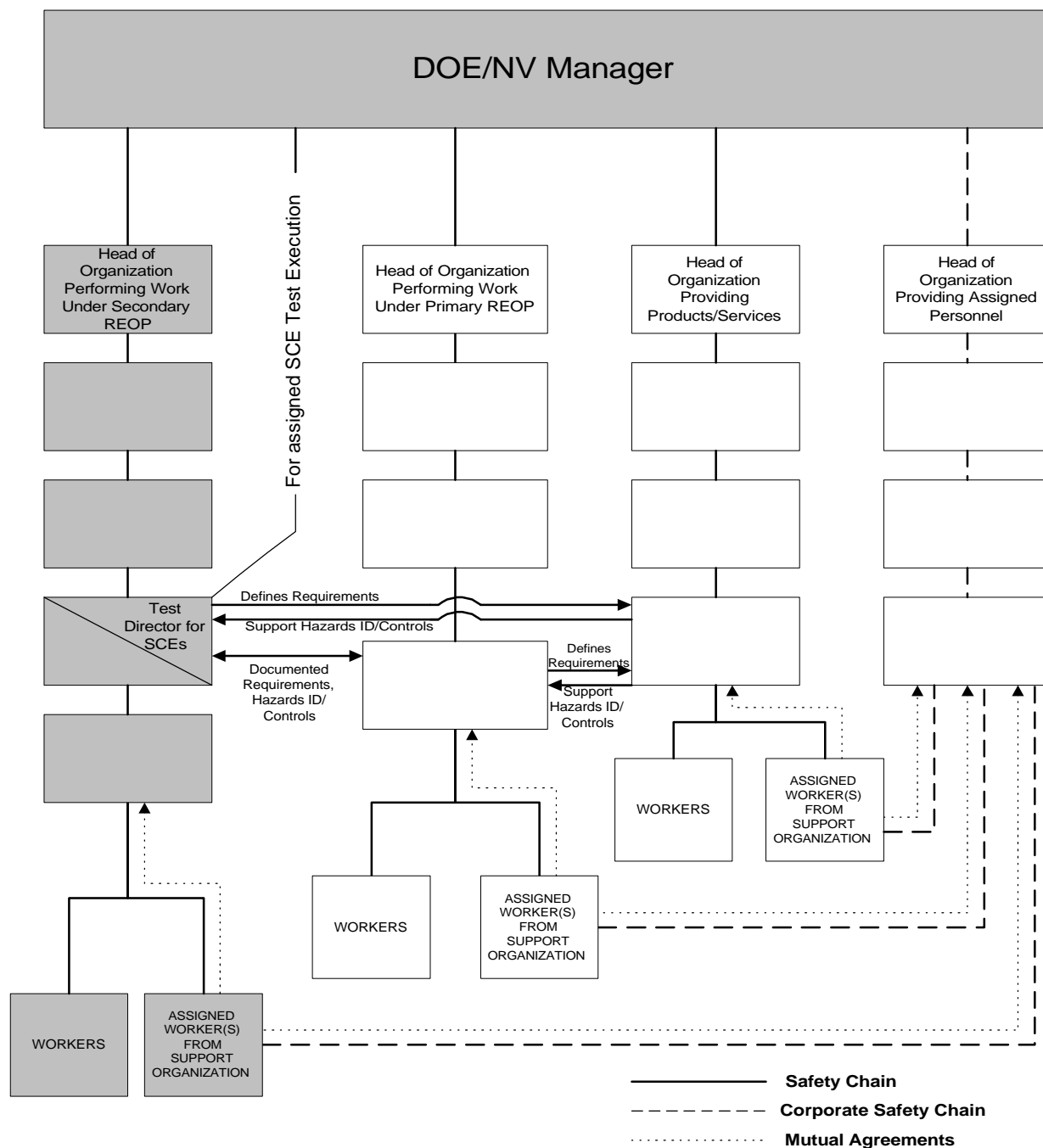


Figure 2

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PRODUCT OR SERVICE PROVIDERS

In the performance of work by a primary or secondary REOP holder, it is common practice within the DOE/NV complex to acquire the support of another organization(s) to provide specific products or services. The requesting REOP holder specifies the requirements for the product or service desired. Depending on the nature of the desired product or service, the supporting organization may fulfil its obligation autonomously or in partnership with the requestor. In the latter case informal communication between the requestor and the provider updating product/service requirements is expected.

The organization providing such products or services is obligated to communicate the identified hazards and controls inherent in providing the products/services within the REOP. This gives the primary/secondary REOP holder the information necessary to ensure that the safety envelopes established by the respective REOP holders are maintained. The organization providing the requested products/services maintains safety responsibility for its employees and is accountable for the safe performance of their work to the DOE/NV Manager. Such product or service organizations do not possess secondary REOPs. See Figure 3 below.

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Organization Safety Chain of Responsibility

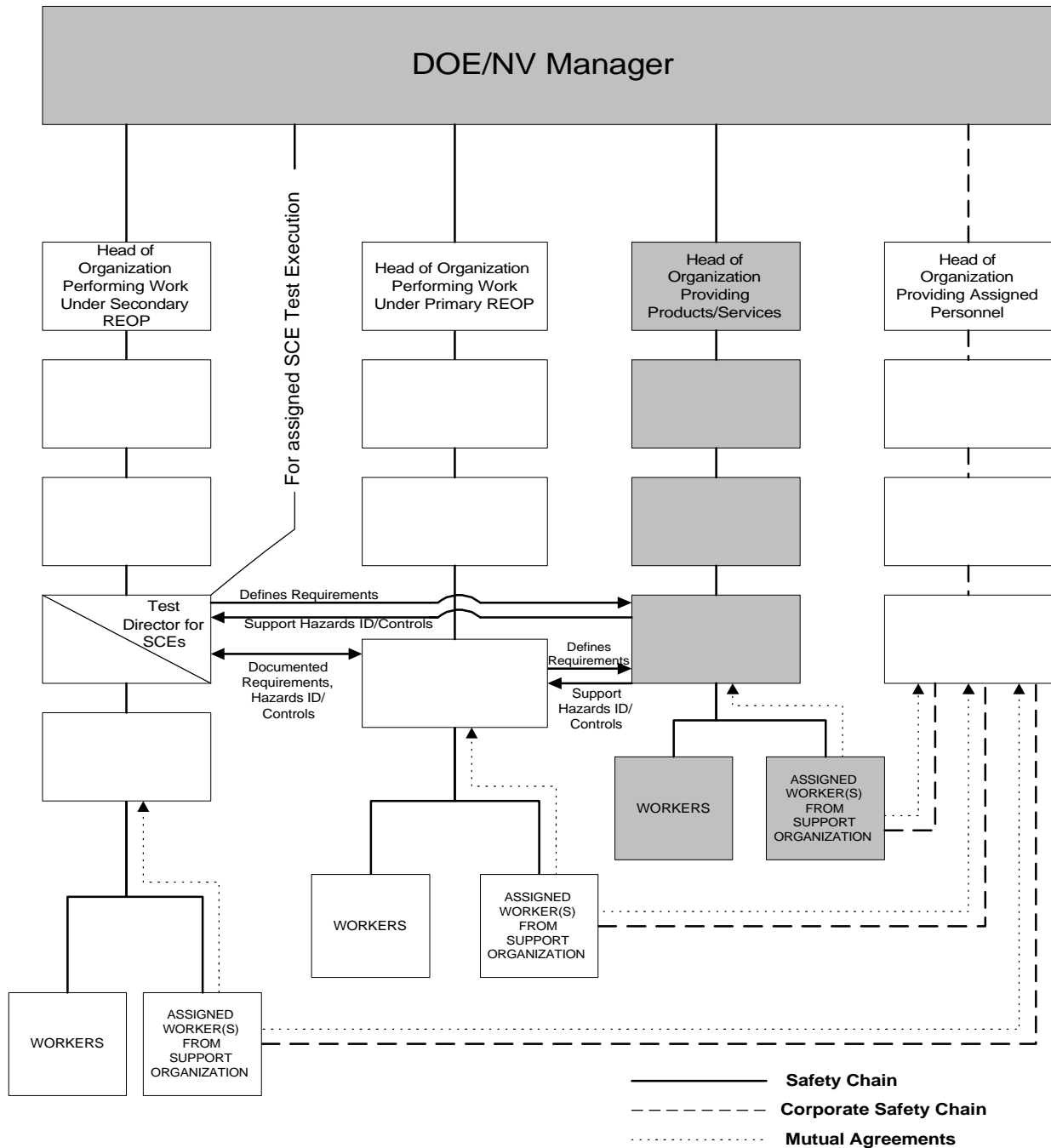


Figure 3

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ASSIGNED PERSONNEL

Primary/Secondary REOP holders and Product/Service providers, may need to acquire the skills of individuals from another corporate organization within the DOE/NV complex to accomplish work considered by the user or supplier as involving high hazard consequences. In such cases, the corporate organization acquiring “assigned” workers assumes the safety responsibility for these employees. Additionally, mutually developed agreements regarding the use of “assigned” workers are documented. See Figure 4 below.

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Organization Safety Chain of Responsibility

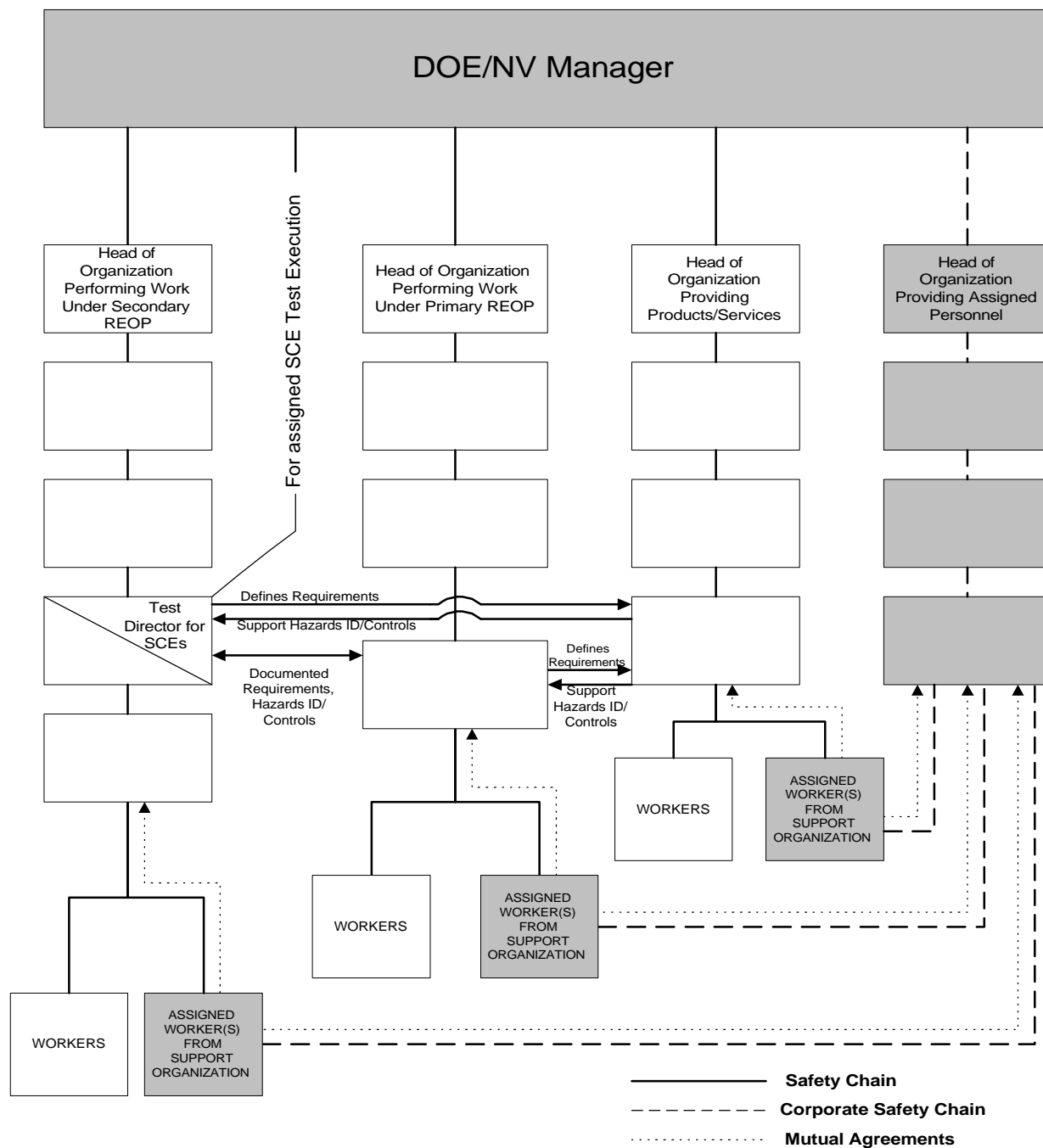


Figure 4

KEY SAFETY ROLES AND RESPONSIBILITIES FOR CORE FUNCTIONS

	DOE NEVADA OPERATIONS OFFICE (DOE/NV)	REAL ESTATE/OPERATIONS PERMIT (REOP) HOLDER	ORGANIZATIONS PROVIDING PRODUCTS/SERVICES
Define the Work	<ul style="list-style-type: none"> • High Level definition, consistent with the Strategic Plan, U.S. Department of Energy priorities, and customer needs. • Define fee incentives where appropriate. 	<ul style="list-style-type: none"> • Develop/coordinate plans and baselines including cost and schedule estimates with appropriate safety integration. • Identify resource requirements. • Identify requirements for products/ services. 	<ul style="list-style-type: none"> • Develop plans and baselines including cost and schedule estimates with appropriate safety integration. • Identify resource requirements.
Analyze the Hazards	<ul style="list-style-type: none"> • Review as appropriate. • Oversee systems and processes. 	<ul style="list-style-type: none"> • Define safety envelope for REOP. • Perform hazard analyses for scope of work. • Ensure hazard analyses for all work to be performed is within the safety envelope. 	<ul style="list-style-type: none"> • Perform hazard analysis of project or support services. • Communicate hazard analysis information for project or support services to REOP holders.
Identify Hazard Controls and Standards	<ul style="list-style-type: none"> • Review and approve hazard controls for those REOP holders that exceed specific risk management criteria. • Review and approve contract requirements and ensure other contracts are appropriately modified. • Define process for assigning safety coordination responsibly. 	<ul style="list-style-type: none"> • Identify hazard controls and standards that define the safety envelope. • Evaluate and approve project and/or support organizations deviations that may impact the safety envelope; seek DOE/NV approval as required. 	<ul style="list-style-type: none"> • Identify hazard controls and standards applicable to support services. • Propose changes to primary REOP holder that may impact the safety envelope.
Perform the Work	<ul style="list-style-type: none"> • Coordinate the resolution of integration issues among contractors/users. • Exercise stop work authority as need. 	<ul style="list-style-type: none"> • Maintain safety of own employees. • Maintain safety coordination responsibility for Real Estate/Operations covered by REOP. 	<ul style="list-style-type: none"> • Maintain safety of own employees. • Conduct work in accordance with applicable controls and standards.
Provide Feedback	<ul style="list-style-type: none"> • Perform self-assessments. • Uses feedback information to improve its safety management systems. • Conduct oversight of contractors and users. 	<ul style="list-style-type: none"> • Perform self-assessments. • Uses feedback information to improve its safety management systems. 	<ul style="list-style-type: none"> • Perform self-assessments. • Uses feedback information to improve its safety management systems. • Provides feedback information to REOP holders to contribute to management system improvements.

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